California Regional Water Quality Control Board Santa Ana Region

August 13, 2004

ITEM:

SUBJECT: Time Schedule Order No. R8-2004-0067 for Orange County Sanitation District

DISCUSSION:

Section 301 of the Clean Water Act (33 USC § 1311) requires all publicly owned treatment works (POTWs) discharging to waters of the United States to meet effluent limitations based upon secondary treatment. However, subpart (h) of that section allows for the issuance of permits with less restrictive effluent limitations to POTWs discharging into marine waters under specific conditions.

The Orange County Sanitation District (OCSD) operates wastewater treatment facilities in Fountain Valley and Huntington Beach that discharge approximately 234 million gallons per day of a mixture of secondary-treated and advanced primary-treated wastewater into the Pacific Ocean. For the past twenty years, permits issued to OCSD by the Regional Board and U.S. EPA have allowed OCSD to discharge waste that does not meet secondary treatment standards pursuant to Section 301(h) of the Clean Water Act. However, due to concern regarding the potential impacts of their discharge, OCSD adopted a policy in July 2002 to treat all of its wastewater to meet secondary treatment standards and chose not to seek continuance of the "301(h) waiver" with their recent permit renewal application.

Since OCSD is no longer requesting a waiver from secondary treatment standards, all future permits must require compliance with those standards. On September 17, 2004, the Regional Board is scheduled to consider adoption of Order No. R8-2004-0062, NPDES No. CA0110604, which will reissue the waste discharge requirements for this discharge. Discharge Specification A.1.a. of Order No. R8-2004-0062 will require the OCSD to achieve compliance with secondary treatment standards forthwith.

OCSD cannot immediately comply with the secondary treatment standards proposed in Order No. R8-2004-0062. OCSD must first construct major improvements to existing facilities and also construct many newfacilities, in order to achieve secondary treatment standards. A detailed time schedule listing the projects that must be completed before compliance can be achieved has been submitted (Exhibit A of the proposed order). This schedule shows completion of the final project near the end of 2012.

Since OCSD will not be able to comply immediately with those provisions of Order No. R8-2004-0062, the Board will concurrently consider adoption of Time Schedule Order No. R8-2004-0067 during their September 17, 2004 meeting. Taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the secondary treatment standards, the proposed Time Schedule Order requires OCSD to achieve compliance with the effluent limitations contained in Discharge Specification A.1.a. of Order No. R8-2004-0062 by December 31, 2012.

This staff report is provided for informational purposes. No action by the Regional Board is recommended at this time.

California Regional Water Quality Control Board Santa Ana Region

Time Schedule Order No. R8-2004-0067

for Orange County Sanitation District Order No. R8-2004-0062, NPDES No. CA0110604

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Board) finds that:

- 1. The Orange County Sanitation District (hereinafter District) operates wastewater treatment facilities in Fountain Valley and Huntington Beach that discharge approximately 234 million gallons per day of a mixture secondary-treated and advanced primary-treated wastewater into the Pacific Ocean.
- 2. The District's discharge has been regulated under Order No. 98-5, NPDES No. CA0110604, which implemented a waiver, pursuant to Clean Water Act Section 301(h), from the provisions requiring all discharges to waters of the United States to meet secondary treatment standards.
- 3. On July 17, 2002, the District adopted a policy to treat all of its wastewater to meet secondary treatment standards and chose not to seek continuance of the "301(h) waiver" when the application for renewal of the permit was submitted.
- 4. On September 17, 2004, the Board reissued the waste discharge requirements for this discharge through the adoption of Order No. R8-2004-0062, NPDES No. CA0110604. Discharge Specification A.1.a. of Order No. R8-2004-0062 requires the District to achieve compliance with secondary treatment standards forthwith.
- 5. The District cannot immediately comply with the secondary treatment standards contained in Order No. R8-2004-0062. The District must first construct major improvements to existing facilities and also construct many new facilities, in order to achieve secondary treatment standards. A detailed time schedule listing the projects that must be completed before compliance can be achieved has been submitted and is attached as Exhibit A of this order.
- 6. The District must be required to achieve compliance with the secondary treatment standards contained in Order No. R8-2004-0062 within the shortest possible timeframe. Taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the standards, it is appropriate to require compliance with the effluent limitations contained in Discharge Specification A.1.a. of Order No. R8-2004-0062 by December 31, 2012.

- 7. Pursuant to Section 13385(j)(3)(B)(iv) of the California Water Code, violations of effluent limits contained in Discharge Specification A.1.a. of Order No. R8-2004-0062 are not subject to mandatory penalties specified in subsections (h) and (i) of Section 13385, provided the District complies with the provisions of this time schedule order.
- 8. The Board has notified the District and interested parties of its intent to adopt this time schedule order.
- 9. The Board, at a public hearing held on September 17, 2004, received evidence and considered all relevant information pertaining to this order.
- 10. This enforcement action is being taken for the protection of the environment and, as such, is exempt from the California Environmental Quality Act (Public Resources Code, Section 21100 et. seq.) in accordance with Section 15321, Chapter 3, Title 14, California Code of Regulations.

IT IS HEREBY ORDERED that, in accordance with Section 13300 of the California Water Code, the Orange County Sanitation District shall:

1. Conform with the following time schedule to achieve compliance with the effluent limitations contained in Discharge Specification A.1.a. of Order No. R8-2004-0062:

| TASK | COMPLIANCE DATE | REPORT OF COMPLIANCE DUE DATE |
|--|-------------------|-------------------------------------|
| Complete construction of trickling filters at Plant 1 | February 15, 2006 | March 1, 2006 |
| Advertise for construction bids for Plant 1 secondary treatment facilities | November 15, 2006 | December 1, 2006 |
| Advertise for construction bids for Plant 2 secondary treatment facilities | January 15, 2007 | February 1, 2007 |
| Complete construction of Plant 2 existing secondary treatment rehabilitation | January 15, 2009 | February 1, 2009 |
| Complete construction of Plant 1 secondary treatment expansion | November 15, 2012 | December 1, 2012 |
| Achieve full compliance | December 31, 2012 | January 15, 2013 |

2. Comply with the following effluent limitations from the effective date of Order No. R8-2004-0062 through February 15, 2011:

| Constituent | 30-day Average Concentration | Monthly Mass Loading |
|---|------------------------------|----------------------|
| Biochemical Oxygen Demand (5-day)(BOD ₅) | 100 mg/l | 2,750 metric tons |
| Total Suspended Solids | 55 mg/l | 1,420 metric tons |

3. Comply with the following effluent limitations from February 16, 2011 to December 30, 2012:

| Constituent | 30-day Average Concentration | Monthly Mass Loading |
|---|------------------------------|----------------------|
| Biochemical Oxygen Demand (5-day)(BOD ₅) | 70 mg/l | 1,500 metric tons |
| Total Suspended Solids | 45 mg/l | 1,000 metric tons |

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on September 17, 2004.

Gerard J. Thibeault
Executive Officer

Exhibit "A"

Project Descriptions

Trickling Filter Rehabilitation and New Clarifiers at Plant 1, Job No. P1-76

This project removes the four existing trickling filters at Plant No. 1 and replaces them with two new trickling filters and clarifiers. The new trickling filter facility will be located in the same footprint as the existing trickling filers and have the same capacity of 30 million gallons per day (mgd). OCSD estimates the project will be operational by February 2006, at an estimated cost of \$46,210,000.

New Secondary Treatment System at Plant No. 1, Job No. P1-102

This project will expand Plant No. 1 to meet the secondary treatment requirement. This includes the construction of up to 80 mgd of secondary treatment process capacity. OCSD estimates the project will be operational by November 2012, at an estimated cost of \$251,100,000.

New Secondary Treatment System at Plant No. 2, Job No. P2-90

This project will expand Plant No. 2 to meet the secondary treatment requirement using trickling filter technology. This includes the construction of up to 60 mgd of secondary treatment process capacity. OCSD estimates the project will be operational by February 2011, at an estimated cost of \$128,727,000.

Rehabilitation of Activated Sludge Plant at Plant No. 2, Job No. P2-74

This project replaces the major piping systems, within the existing secondary plant at Plant 2, that have begun to fail or are at the end of their useful life. The project also optimizes and automates the process of the high-purity oxygen (HPO) activated sludge system. OCSD estimates the project will be operational by January 2009, at an estimated cost of \$20,474,000.